(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 11 November 2004 (11.11.2004)

PCT

(10) International Publication Number WO 2004/097368 A3

(51) International Patent Classification⁷:

G01N 33/53

(21) International Application Number:

PCT/US2004/011843

(22) International Filing Date: 16 April 2004 (16.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/466,358 60/536,913

28 April 2003 (28.04.2003) US 16 January 2004 (16.01.2004) US

(71) Applicant (for all designated States except US): CIPHER-GEN BIOSYSTEMS, INC. [US/US]; 6611 Dumbarton Circle, Fremont, CA 94555 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): YIP, Tai-Tung [US/US]; 1532 Aster Court, Cupertino, CA 95014 (US). FUNG, Eric, Thomas [US/US]; 440 Whisman Park Drive, Mountain View, CA 94043 (US).
- (74) Agents: ELDERKIN, Dianne, B. et al.; Woodcock Washburn, LLP, 46th floor, One Liberty Place, Philadelphia, PA 19103 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, F1, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 30 June 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVED IMMUNOASSAYS

(57) Abstract: Methods for discriminating between related proteins and other analytes in a sample and for correlating protein expression with disease states.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/11843

	PC1/0304	711043	
A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : G01N 33/53 US CL : 435/7.1 According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) U.S.: 435/7.1, 4, 7.4, 7.6, 7.71, 7.72, 7.8 7.9, 7.91, 7.92, 7.93, 7.94, 7.95; 436/514, 517, 518, 536, 538, 541			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, scarch terms used)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
37, col. 37, lines 3-32, and col. 40, lines 48-57.			
X US 6,480,618 A (PAREKH et al) 16 May 2000, c 12, line 7.	1, 1-1, 1- (-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
Y 23, 29			
		·	
Further documents are listed in the continuation of Box C.	See patent family anner	۲.	
Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the		
"A" document defining the general state of the art which is not considered to be of particular relevance	principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be		
"E" earlier application or patent published on or after the international filing date. "L" document which may throw doubts on priority claim(s) or which is cited to		e considered to involve an inventive step	
establish the publication date of another citation or other special reason (as specified)			
"O" document referring to an oral disclosure, use, exhibition or other means	being obvious to a person sk		
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the sar	"&" document member of the same patent family	
Date of the actual completion of the international search 13 October 2004 (13.10.2004) Date of mailing of the international search report 27 APR 2005			
Name and mailing address of the ISA/US Afthorized officer			
Mail Stop PCT, Attn: ISA/US Commissioner for Patents	Mail Stop PCT, Attn: ISA/US		
P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-0822			
Facsimile No. (703) 305-3230			

Form PCT/ISA/210 (second sheet) (January 2004)